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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,079	04/25/2001	Gene D. Tener	017750-575	5957
7590	01/26/2006		EXAMINER	
Patrick C. Keane BURNS, DOANE, SWECKER & MATHIS, L.L.P. P.O. Box 1404 Alexandria, VA 22313-1404			EDWARDS, PATRICK L	
			ART UNIT	PAPER NUMBER
			2621	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/841,079

Applicant(s)

TENER ET AL.

Examiner

Patrick L. Edwards

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20 is/are allowed.
- 6) ☒ Claim(s) 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. The response received on 11-29-2005 has been placed in the file and was considered by the examiner. An action on the merits follows.

Response to Arguments

2. The arguments filed on 11-29-2005 have been fully considered. A response to these arguments is provided below.

Prior Art Rejections

Summary of Argument:

Claims 1 and 10 have been amended to include the limitation that the first and second frames are obtained from a stationary infrared imagery. Claims 21 and 22 have been amended to include the limitation that the first and second frames of image data are based on an input from a stationary sensor. Applicant alleges that these new limitations are not taught by the currently applied references.

Examiner's Response:

Respecting claims 1 and 10, applicant's arguments have been fully considered and are persuasive. Respecting claims 21 and 22, applicant's arguments have been fully considered but are unpersuasive. This new limitation will be addressed below.

Allowable Subject Matter

3. Claims 1-20 are allowed.

4. The following is an examiner's statement of reasons for allowance: The closest cited prior art (Bender et al. (USPN 5,657,402) and Bergen (USPN 6,208,765)) fails to disclose all of the claimed features of the now amended independent claims 1 and 10. The remaining claims are allowable because of their dependency on the allowable independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergen (USPN 6,208,765) in view of Martins et al. (USPN 6,438,275).

Regarding claim 22, which is representative of claim 21, Bergen discloses a sensor for generating input data, and a processor module coupled to the sensor (Bergen Figure 1).

Bergen further discloses selecting a first frame of image data as a template frame (Bergen col. 3 lines 16-18).

Bergen further discloses capturing a second frame of image data (Bergen col. 3 lines 18-19).

Bergen further discloses aligning the second frame of image data with the template frame of image data by correcting line of sight deviations therebetween (Bergen col. 3 lines 1-5 & 18-20: The reference discloses aligning images that have a “slightly different perspective.”).

Bergen further discloses spatially oversampling at least a portion of the aligned second frame of image data by a factor greater than one (Bergen col. 3 lines 25-32).

Bergen further discloses integrating the spatially oversampled portion of the aligned second frame of image data with image data of the template frame (Bergen col. 3 lines 33-45).

Bergen further discloses that the first and second images are based on input data from a stationary sensor (see Figure 1. Sensor 102 can be any type of camera—including a stationary one. However, even if a hand held camera were disclosed, such a camera is still station when affixed to a tripod or some other stationary device.).

Bergen fails to expressly disclose repeating the above steps for subsequently captured frames of data repeating the above steps to process subsequently captured frames of data into a continuous video stream. Bergen is directed to the processing of video frames to produce a single enhanced image, but does not disclose repeating this operation to make multiple enhanced frames. Martins, on the other hand, teaches that individual video frames can be enhanced by increasing their resolution (Martins col. 1 lines 29-31). It would have been obvious to one reasonably skilled in the art at the time of the invention to modify Bergen’s image resolution enhancement system by applying it to multiple frames as taught by Martins. Such a modification would have allowed for the enhancement—by way of increased resolution—of a continuous video stream (or moving image), and would have resulted in an improved quality video image (Bergen col. 1 lines 29-30).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L Edwards whose telephone number is (571) 272-7390. The examiner can normally be reached on 8:30am - 5:00pm M-F.

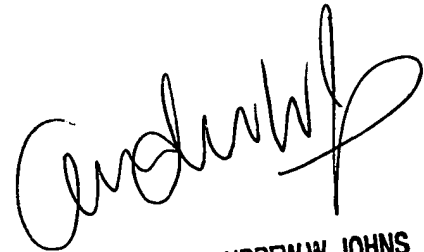
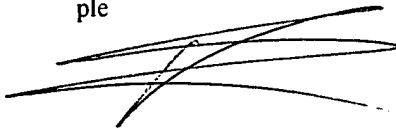
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Mancuso can be reached on (571) 272-7695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick L Edwards

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**ANDREW W. JOHNS
PRIMARY EXAMINER**